

TOWN OF LEVERETT Massachusetts 01054

DATE: 6 September 2017

FROM: Peter d'Errico, Chair, SelectBoard, Town of Leverett

TO: Federal Communications Commission

SUBJECT: Deployment and availability of advanced telecommunications capability

Executive Summary:

"Advanced telecommunications"—as the statutory definition states—"enables users to originate and receive high-quality voice, data, graphics, and video telecommunications." The emphasis on "originate and receive" has special importance for businesses and other *information producers*, who need symmetrical upload / download Internet access speeds. Encouragement and support of network technologies adequate to the needs of information producers ensures economic and demographic viability of rural areas.

Full Comment:

The Town of Leverett, Massachusetts, hereby submits comments concerning the deployment and availability of advanced telecommunications capability, in response to the Commission's invitation to participate in its annual Section 706 inquiry, FCC Docket 17-199.

Leverett is a rural community in Western Massachusetts, with a population of nearly 2000 in about 800 households in 22.7 square miles: approximately 88 persons per square mile. {See: http://www.leverett.ma.us/ }

The Town owns LeverettNet, a 'last mile' gigabit Fiber-to-the-Home (FTTH) network it constructed to connect all residents to the Internet. The Town contracts with third-parties to provide Network Operator, Internet Service Provider, and maintenance services, the costs of which are borne by subscribers. {See: https://lmlp.leverettnet.net/ }

Prior to construction of LeverettNet, Leverett residents had only limited Internet access via satellite and DSL, both of which impose severe limits on connection capacity and speed. These limits constituted a serious impediment to public safety—police, fire, and

highway—as well as to the Town school and library. LeverettNet greatly enhanced public safety and educational operations.

The availability of LeverettNet also improved the business climate in Town—allowing existing businesses to expand and new businesses to open. Further, the availability of high-speed broadband improved real estate and rental markets. In short, the deployment of advanced telecommunications technology through a public-private broadband partnership transformed the Leverett community.

"Advanced telecommunications"—as the statutory definition states—"enables users to originate and receive high-quality voice, data, graphics, and video telecommunications." In our experience, the emphasis on "originate and receive" has special importance for businesses—home-based and telecommuting—that work with large data, graphics, and video transmissions. Mobile access—especially as subject to throttling of download speed, limited upload speed, and data caps—cannot provide sufficient Internet access to sustain information entrepreneurs.

A telecommunications system deserving the label "advanced" provides symmetrical speeds, so that uploads and downloads receive equal treatment. A system that prioritizes download—though it may currently suffice for consumers of information—will not serve those who *produce* information. Information producers working in Leverett—including CGI services, authors, software engineers, graphic artists, etc.— require *symmetrical* high-speed Internet access. Indeed, LeverettNet makes it possible for these entrepreneurs to work in Leverett at all.

In short, an equation of mobile and fixed telecommunication technologies fails to recognize needs of information producers and restricts future development of information work and businesses. Encouragement and support of network technologies adequate to the needs of information producers has special significance in ensuring economic and demographic viability of rural areas like Leverett, where "brick-and mortar" businesses cannot be sustained.